

When authorized, the Department will pay for Applied Water at the Contract price per cubic meter [gallon].

When seeding is completed, amounts due for these items will be payable.

The Department will pay for Loam and Mulch as provided in Section 615 - Loam and Section 619 - Mulch.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
618.1301 Seeding Method Number 1, Plan Quantity	Unit
618.1401 Seeding Method Number 2, Plan Quantity	Unit
618.1411 Seeding Method Number 3, Plan Quantity	Unit
618.143 Special Seeding	Unit
618.15 Temporary Seeding	Unit
618.16 Crown Vetch Seeding	Unit
618.25 Applied Water [gallon]	Cubic Meter

SECTION 619 - MULCH

619.01 Description This work shall consist of furnishing and applying hay, straw, bark, erosion control mix, or cellulose fiber for covering slopes and other areas with a mulch as shown on the plans or authorized.

619.02 Mulch Material shall conform to the requirements specified in the following Sections of Division 700 - Materials:

Mulch	717.04
Mulch Binder	717.05

619.03 General Cellulose fiber mulch shall be used with Seeding Method 1 and approved areas, which may include, but are not limited to, lawns adjacent to developed

property, areas subject to high air blasts created by moving vehicles, and areas where hay mulch would create a hazard.

619.04 Applying Mulch Mulch shall be any of the following types of material.

a. Hay or straw mulch for both seeded and unseeded areas shall be spread evenly and uniformly over the designated areas. Unless otherwise directed, mulch shall be applied at the rate of 3.5 Mg to 4.5 Mg/ha [1.5 ton to 2 ton/acre]. Too heavy an application of mulch shall be avoided. Lumps and thick mulch material shall be thinned.

Unless otherwise authorized, hay or straw mulch shall be anchored in place by uniformly applying an acceptable mulch binder. Mulch binder shall be applied as soon as the mulch is placed. Application of a concentrated stream of mulch binder will not be allowed. Mulch binder will be paper fiber mulch applied at 2.3 Kg/Unit [5 lbs/Unit] or approved equal. Water spray may be used as a temporary binder.

Temporary mulching shall be applied as per the Contractor's SEWPCP, spread immediately to protect soil from erosion during all stages of construction throughout all seasons of the year.

b. Cellulose Fiber Mulch shall be applied as a waterborne slurry. The cellulose fiber and water shall be thoroughly mixed and sprayed on the area to be covered so as to form a uniform mat of mulch at the rate of not less than 20 kg [40 lb] of mulch material per 100 m² [1000 ft²] unit of area.

Cellulose fiber mulch may be mixed with the proper quantities of seed, fertilizer, and agricultural limestone as required under Section 618 - Seeding or may be applied separately the same day as seeding.

c. Bark mulch and erosion control mix shall be placed to cover the slope with a 100 mm [4 in] deep blanket or as called for on the Plans or by the Resident.

619.05 Maintenance The Contractor shall maintain the hay, straw, or fiber mulch by repairing all damaged mulch and by correcting all shifting of the mulch due to wind, water, or other causes, until an acceptable growth of grass has been achieved.

If cellulose fiber mulch is used, any reseeding will require additional cellulose fiber

mulch.

Bark mulch and erosion control mix will be accepted upon completion. Upon acceptance of each area, the Contractor will be relieved of further responsibility for maintaining that area or repairing damage except that resulting from their own or subcontractor's operations.

If water spray is used as a temporary binder, it shall be maintained in a manner acceptable to the Resident.

619.06 Method of Measurement Hay and straw mulch measured and accepted for payment will be the number of units of 100 m² [1000 ft²] each, shown in the Schedule of Items in the contract.

This quantity will be considered final, and no adjustments will be made, except when the actual area mulched varies from the number of units shown in the Schedule of Items by more than 15%.

The quantity of bark mulch and erosion control mix measured and accepted for payment will be the number of cubic yards each, delivered and installed to the required depth as shown on the plans or as directed. Measurement will be parallel with the slope of the ground.

619.07 Basis of Payment The accepted areas mulched will be paid for at the contract price per unit, which shall be full compensation for furnishing and spreading the hay or straw and mulch binder, cellulose fiber mulch, bark mulch or erosion control mix.

When mulch is measured by bales, each bale will be paid for at 60% of the contract price per unit for Pay Item 619.1201.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
619.1201 Mulch, Plan Quantity	Unit
619.1301 Bark Mulch	cubic meter [Cubic Yard]
619.1401 Erosion Control Mix	cubic meter [Cubic

Yard]

SECTION 620 - GEOTEXTILES

620.01 Description This work shall consist of the furnishing and installing of woven geotextile fabric or nonwoven geotechnical fabric, hereinafter called fabric, as shown in the Contract, or otherwise directed. This Section is intended for use in conjunction with Section 722 - Geotextiles.

620.02 Materials Geotextiles shall meet the requirements in the following Sections of Division 700 - Materials:

Stabilization/Reinforcement Geotextile	722.01
Drainage Geotextile	722.02
Erosion Control Geotextile	722.03
Separation Geotextile	722.04

620.03 Placement

a. Stabilization/Reinforcement and Separation Geotextile The installation site shall be prepared by clearing, grubbing, and excavating or filling the area to the design grade. This includes the removal of topsoil and vegetation. Soft spots and unsuitable areas identified during site preparation shall be excavated and backfilled with select material and compacted using normal procedures, as directed.

The geotextile shall be laid smooth without wrinkles or folds on the prepared subgrade in the direction of construction traffic. The subbase shall be placed by end dumping onto the geotextile from the edge of the geotextile, or over previously placed Subbase aggregate. Construction vehicles shall not be allowed directly on the geotextile. The subbase shall be placed such that at least the minimum specified lift thickness shall be between the geotextile and equipment tires or tracks at all times. Turning of vehicles shall not be permitted on the first lift above the geotextile. Any ruts occurring during construction shall be filled with additional subbase material and compacted to the specified density. In stabilization applications, the use of vibratory compaction equipment is not recommended with the initial lift of subbase as it may cause damage to the geotextile.